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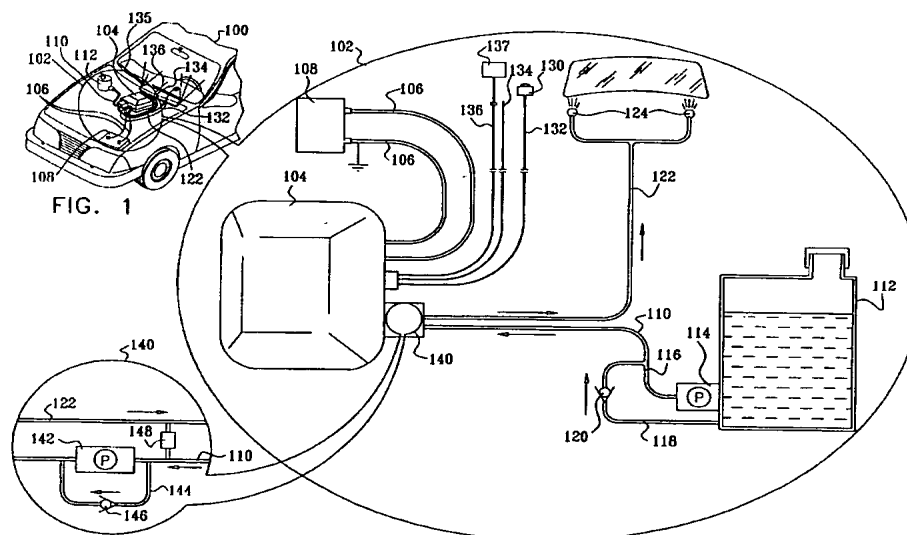
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(54) Title: APPARATUS AND METHOD FOR CLEANING OR DE-ICING VEHICLE ELEMENTS



(57) Abstract: A liquid heating assembly (102) including a heat-conductive displaceable element (250) and a liquid heating enclosure (210, 212) defining a liquid heating volume including a primary liquid (258) heating volume portion and a secondary liquid heating volume portion (254), separated by the heat-conductive displaceable element (250), the primary liquid heating volume portion including a heat exchanger for directly heating liquid in the primary liquid heating volume portion and for indirectly heating liquid in the secondary liquid heating volume portion via the heat-conductive displacement element (250).



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